

Gulf of Mexico Regional Sediment Management Master Plan (GRSMMP) (ver 11/6/06)

The Gulf states have acknowledged that sediment resources are integral to accomplishing many Alliance restoration initiatives. They also acknowledged a need for a better understanding of regional sediment systems and processes to inform decisions about projects and actions that use sediment resources or affect them. The Governors' Action Plan identifies development of a Gulf Region Sediment Management Master Plan as an implementation action for the Conservation and Restoration Workgroup.

The material below has been drafted to help define this plan.

Objectives/Purpose:

Develop a Gulf of Mexico regional master plan that uses the understanding of sediment dynamics (inputs, outputs, movement) to manage sediment resources to accomplish environmental restoration, conservation, and preservation, while reducing coastal erosion and coastal storm damages and associated costs of sediment management. It will help link sources of sediment with sediment needs, provide a basis for assessing competing needs for sediment, and foster more cost effective sediment management.

[GRSMMP -emph on sediment budgets and needs[???]

Goals:

- 1) Develop understanding of Gulf sediment system dynamics and provisions for better management of sediment resources in the region (including sources, movement, sinks, related watershed and coastal processes, and influences of structures and actions that affect sediment movement, use, and loss,)
- 2) Provide information to inform projects and activities involving sediment, and assist in prioritizing uses of sediment resources.
- 3) Develop/suggest a streamlined approach for regulatory and policy processes that take biodiversity and environmental considerations in the same light (cost-benefit) as other costs and benefits;
- 4) Streamline regulatory processes to consider beneficial uses for existing projects
- 5) Leverage resources for inter-related programs and projects
- 6) Facilitate effective sediment management in sediment systems that cross political boundaries
- 7) Increase stakeholder participation in development and implementation of sediment management strategies.
- 8) Use best management practices in managing sediment resources and minimize secondary adverse impacts; create a protocol toward BMPs
- 9) Promote information exchange about Gulf region sediment resources and the range of related management needs.
- 10) Inventory available sediment resources and needs.

Gulf of Mexico Regional Sediment Management Master Plan

I. Introduction

- A. Gulf of Mexico Alliance Overview**
- B. Wetland and Coastal Conservation and Restoration**
 - 1. State participation**
- C. Gulf of Mexico Regional Sediment Management Master Plan**
 - 1. Purpose**
 - 2. Goals**
- D. Expected benefits**
- E. Stakeholders**

II. Regional Sediment Processes - Understanding regional sediment processes as a foundation for regional management strategies

- A. Riverine**
- B. Estuarine**
- C. Coastal**
- D. Offshore**
- E. Wetland/Marsh**
- F. Fine-grained**
- G. Management influences on regional processes**

III. Sediment Resource Management Problems and Opportunities

- A. Sediment related problems**
 - 1. Watershed issues**
 - 2. Dredging/disposal practices**
 - 3. Sediment starvation**
 - 4. Storm damage**
- Aggradation and degradation issues; shoaling**
- B. Sediment management opportunities**
 - 1. Wetland/Ecosystem restoration**
 - 2. Beach/shoreline restoration**
 - 3. Watershed restoration**
 - 4. Project monitoring - to support adaptive process/approach**
- C. Regional management impediments**
 - 1. Policies**
 - 2. Cost vs. benefits**

IV. Data Management/Regional GIS

- A. Existing data**
- B. Data needs**
- C. Data collection programs**
- D. Data sharing**
- E. Data analysis**

V. Tools

- A. Regional hydrodynamic models**
- B. Regional sediment budget**
- C. Survey and mapping, coring**
- D. Storm vulnerability models**
- E. Needed R&D**

VI. Natural Resource Inventory - protocol that can be used for projects to make sure no harm done; leverage w/efforts of Hab ID group

- A. Environmental Resources -to protect, restore, improve – relative to sediment needs**
- B. Sediment Resources - character, quality,**

VIII. Ecosystem Impacts related to sediment need [move to probs and opportunities]

- A. Man-made**
- B. Natural**

IX. Sediment Project Management and Initiatives

- A. Dredging**
- B. Ecosystem Restoration**
- C. Beach/Shoreline Restoration (incl barrier islands)**
- D. Suspended sediment**
- E. Storm damage prevention**
- F. Coastal subsidence**
- G. Other**

X. Existing Related Programs -what, who, resources

- A. Leveraging experience, efforts, and funding**
[GRSMMP -emph on sediment budgets and needs]
- B. Existing authorities**
- C. Lessons learned**

- Dredged material management planning
- Studies of sediment borrow sites

[Randy - 2 Reports: Dredged Material Mgt Strategy for Tampa Bay (Jacksonville District); Tampa Bay Dredged Hole Habitat Assessment Project (Apr 2005) - examined sediment characteristics, fish use, water quality and other info to make recommendations regarding filling or retaining the holes

XI. Information Transfer - what form(s) should this MP take? Communication Plan

- A. Products combined report and website (recommended -Carl)**
 - 1. reports**
 - 2. website**
 - 3. brochures**
 - 4. videos**
- B. Outreach**
- C. Education**
- D. News media**